

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A computer-implemented method for enhancing the security of communication over a network, the method comprising:
  - receiving a set of authentication credentials from a user;
  - receiving from the user a request that requires communication over the network with a remote system;
  - applying a collection of security privileges to the set of authentication credentials to determine if the user is authorized to carry out the request wherein applying comprises applying based at least in part upon a role-based determination that involves referencing a record that assigns access privileges to various roles that can be assumed by the user;
  - selectively transmitting a security certificate over the network to the remote system, the certificate containing a public key;
  - receiving from the remote system a session ticket that has been encrypted with the public key;
  - decrypting the session ticket with a corresponding private key;
  - using the session ticket as an authenticator for subsequent communications with the remote system;
  - wherein the remote system is a service provider configured to extend the functionality of a software application by remotely providing a service, and wherein selectively transmitting therefore comprises selectively transmitting the security certificate to the service provider;
  - wherein receiving from the user a request comprises receiving from the user a request for delivery of the service provided remotely by the service provider;
  - wherein selectively transmitting comprises transmitting only when the collection of security privileges indicates that the user is authorized to receive the service provided remotely by the service provider;

wherein using the session ticket comprises using the session ticket to secure communications associated with the service provider extending the functionality of the software application; and  
wherein receiving a set of authentication credentials comprises receipt of the authentication credentials by a first computing device, the first computing device being the same computing device upon which operates the software application that receives the extended functionality from service provider, and wherein the first computing device is the same computing device upon which the role-based determination is made, the record that is referenced as part of that determination being stored on the first computing device, and wherein selectively transmitting a security certificate to the service provider further comprises transmitting the security certificate from the first computing device to the service provider, and wherein using the session ticket to secure communications further comprises using the session ticket to secure direct communications between the service provider and the first computing device.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) The method of claim 4<sub>1</sub>, wherein using the session ticket comprises using the session ticket without requiring the user to re-submit the set of authentication credentials.

6. (Currently Amended) The method of claim 2<sub>1</sub>, wherein using the session ticket comprises using the session ticket until it expires.

7. (Currently Amended) The method of claim 31, wherein:  
selectively transmitting a security certificate to the remote system comprises selectively transmitting a security certificate to a remote application configured to extend the functionality of a software application by providing access to information; and receiving from the user a request comprises receiving a request for access to the information.
8. (Original) The method of claim 1, wherein selectively transmitting a security certificate comprises selectively transmitting a security certificate that contains an embedded indication of the identity of an entity associated with which the user is associated.
9. (Previously Amended) The method of claim 1, wherein applying a collection of security privileges further comprises applying access rights that are distributed relative to a plurality of user accounts.
10. (Cancelled)
11. (Previously Amended) The method of claim 9, wherein applying a collection of security privileges comprises applying access rights based at least in part upon a determination of which roles are assigned to a user account associated with a user.
12. (Currently Amended) A computer-implemented method for enhancing the security of communication over a network, the method comprising:  
generating a public key and a corresponding private key;  
storing the private key;  
transmitting the public key over the network to a registration service;  
receiving from the registration service a security certificate that includes the public key;

transmitting the security certificate over the network to an entity with which a channel of communication is desired;  
receiving from the entity a session ticket encrypted with the public key;  
decrypting the session ticket with the private key; ~~and~~  
using the session ticket as an authenticator for subsequent communications with the entity, wherein using the session ticket comprises using the session ticket as a cryptography key for encrypting or decrypting messages; and  
wherein receiving a session ticket from the entity comprises receipt of the session ticket by a first computing device;  
wherein decrypting the session ticket with the private key is a function that occurs via processing executed by the first computing device; and  
wherein using the session ticket as an authenticator further comprises using the session ticket as an authenticator for subsequent communications between the entity and the first computing device.

13. (Cancelled)

14. (Original) The method of claim 12, wherein transmitting the security certificate over the network comprises transmitting the security certificate to a service provider configured to extend the functionality of a software application by remotely providing a service.

15. (Original) The method of claim 14, wherein using the session ticket comprises using the session ticket to secure communications with the service provider.

16. (Original) The method of claim 12, wherein transmitting the security certificate over the network comprises transmitting the certificate to a remote peer.

17. (Original) The method of claim 16, wherein transmitting the security certificate over the

network comprises transmitting the security ticket from a first application host to a second application host.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Currently Amended) A computer-implemented method for enhancing the security of communication over a network between multiple peer application hosts, the method comprising:

- receiving a security certificate from a first application host;
- generating a session ticket;
- encrypting the session ticket with a public key contained in the security certificate;
- transmitting the session ticket to the first application host; ~~and~~
- receiving a message from the first application host, the message being at least partially encrypted in accordance with the session key prior to its being encrypted with the public key; and

wherein said steps of receiving a security certificate, generating, encrypting, transmitting, and receiving a message are all conducted via processing by the same computing device.

27. (Original) The method of claim 26, further comprising:

generating a response message;  
encrypting the response message; and  
transmitting the message to the first application host.

28. (Original) The method of claim 26, further comprising authenticating the certificate.

29. (Original) The method of claim 26, wherein authenticating the certificate comprises interacting with an authentication service to validate an expression of the first application host's identity.